

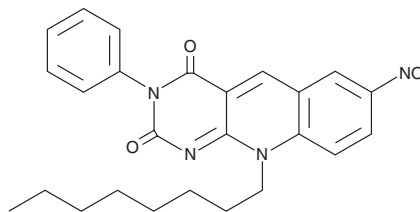
PRODUCT INFORMATION



CAY10625

Item No. 13836

CAS Registry No.: 137346-42-0
Formal Name: 7-nitro-10-octyl-3-phenyl-pyrimido[4,5-b]quinoline-2,4(3H,10H)-dione
MF: C₂₅H₂₆N₄O₄
FW: 446.5
Purity: ≥95%
UV/Vis.: λ_{max}: 210, 233, 292, 396 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CAY10625 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10625 in the solvent of choice, which should be purged with an inert gas. CAY10625 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10625 in ethanol is approximately 0.5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Description

Survivin is a cellular protein implicated in cell survival by interacting with and inhibiting the apoptotic function of several proteins including Smac/DIABLO, caspase-3, and caspase-7.^{1,2} Survivin also plays a role in the regulation of the cell cycle as part of a protein complex that includes INCENP, Aurora B kinase, and Borealin. CAY10625 is an antagonist of the interaction between survivin and the apoptosis-promoting protein Smac/DIABLO, exhibiting an IC₅₀ value of 2.2 μM.³ It inhibits the interaction of survivin with INCENP less effectively with an IC₅₀ value of 20 μM. CAY10625 is cell-permeable and sensitizes cells to the induction of apoptosis by doxorubicin.³

References

1. Ryan, B. M., O'Donovan, N., and Duffy, M. J. Survivin: A new target for anti-cancer therapy. *Cancer Treat. Rev.* **35(7)**, 553-562 (2009).
2. Shin, S., Sung, B. J., Cho, Y. S., *et al.* An anti-apoptotic protein human survivin is a direct inhibitor of caspase-3 and -7. *Biochemistry* **40(4)**, 1117-1123 (2001).
3. Oikawa, T., Unno, Y., Matsuno, K., *et al.* Identification of a small-molecule inhibitor of the interaction between Survivin and Smac/DIABLO. *Biochem. Biophys. Res. Commun.* **393(2)**, 253-258 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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